

IN THE CLAIMS:

This Listing of Claims replaces all prior Listings and versions of claims in the above-identified application.

Listing of Claims:

1-72. (Cancelled)

73. (New) An isolated composition for eliciting a cellular immune response, comprising isolated mannose receptor-bearing antigen presenting cells that have been pulsed *in vitro* or *ex vivo* with a conjugate comprising a tumor antigen and a carbohydrate polymer comprising mannose, wherein said carbohydrate polymer is a fully oxidized carbohydrate polymer comprising free aldehydes, and wherein said composition elicits a cytotoxic T lymphocyte (CTL) response.

74. (New) The composition of Claim 73, wherein said mannose receptor-bearing antigen presenting cells are derived from a cell population selected from the group consisting of peripheral blood leukocytes, bone marrow, stem cells, peritoneal cells, spleen, lung and lymph node cells.

75. (New) The composition of Claim 73, wherein said mannose receptor-bearing antigen presenting cells are selected from the group consisting of macrophage cells and dendritic cells.

76. (New) The composition of Claim 73, wherein said mannose receptor-bearing cells comprise antigen presenting cells that express molecules selected from the group consisting of CD11b, CD14, CD68, CD80 and CD86.

77. (New) The composition of Claim 73, wherein said mannose receptor-bearing antigen presenting cells comprise cells that have been contacted with one or more biological response modifiers selected from the group consisting of a cytokine and a vitamin under conditions effective to induce expression of carbohydrate receptors by said cells.

78. (New) The composition of Claim 77, wherein said biological response modifiers induce expression of mannose receptors on said antigen presenting cell.

79. (New) The composition of Claim 77, wherein said biological response modifiers are selected from the group consisting of granulocyte macrophage colony stimulating factor (GM-CSF), interleukin-3, interleukin-4, vitamin D, macrophage colony stimulating factor (M-CSF), Flt-3 ligand and tumor necrosis factor (TNF) alpha.

80. (New) The composition of Claim 73, wherein said antigen is a mucin polypeptide, one or more repeated subunits thereof, or an antigenic fragment of said repeated subunits, said fragment comprising at least 5 amino acids of said repeated subunits.

81. (New) The composition of Claim 80, wherein said mucin is human mucin.

82. (New) The composition of Claim 80, wherein said antigen comprises two to eighty copies of said repeated subunits of human mucin.

83. (New) The composition of Claim 80, wherein said one or more repeated subunits of said antigen comprise part of a fusion polypeptide.

84. (New) The composition of Claim 73, wherein said mannose is selected from the group consisting of: (a) mannose and (b) a conformational and configurational isomer of mannose.

85. (New) The composition of Claim 73, wherein said composition further comprises a pharmaceutically acceptable carrier.

86. (New) A composition comprising a mannose receptor-bearing antigen presenting cell population for eliciting a cellular immune response, wherein said population is produced by a method consisting of pulsing mannose receptor-bearing antigen presenting cells *in vitro* or *ex vivo* with a conjugate comprising a tumor antigen and a carbohydrate polymer comprising mannose, wherein said carbohydrate polymer is a fully oxidized carbohydrate polymer comprising free aldehydes.

87. (New) An isolated composition for eliciting a cellular immune response, wherein the composition is produced by a method consisting of

- a) culturing isolated mannose receptor-bearing antigen presenting cells with one or more biological response modifiers selected from the group consisting of a cytokine and a vitamin; and

b) pulsing said isolated mannose receptor-bearing antigen presenting cells *in vitro* or *ex vivo* with a conjugate comprising a tumor antigen and a carbohydrate polymer comprising mannose, wherein said carbohydrate polymer is a fully oxidized carbohydrate polymer comprising free aldehydes.

88. (New) The composition of Claim 87, wherein said biological response modifier selected from the group consisting of granulocyte macrophage colony stimulating factor (GM-CSF), interleukin-3, interleukin-4, vitamin D, macrophage colony stimulating factor (M-CSF), Flt-3 ligand and tumor necrosis factor (TNF) alpha.

89. (New) The composition of Claim 87, wherein said mannose receptor-bearing antigen presenting cells are selected from the group consisting of macrophage cells and dendritic cells.

90. (New) The composition of Claim 87, wherein said antigen is a mucin polypeptide, one or more repeated subunits thereof, or an antigenic fragment of said repeated subunits, said fragment comprising at least 5 amino acids of said repeated subunits.